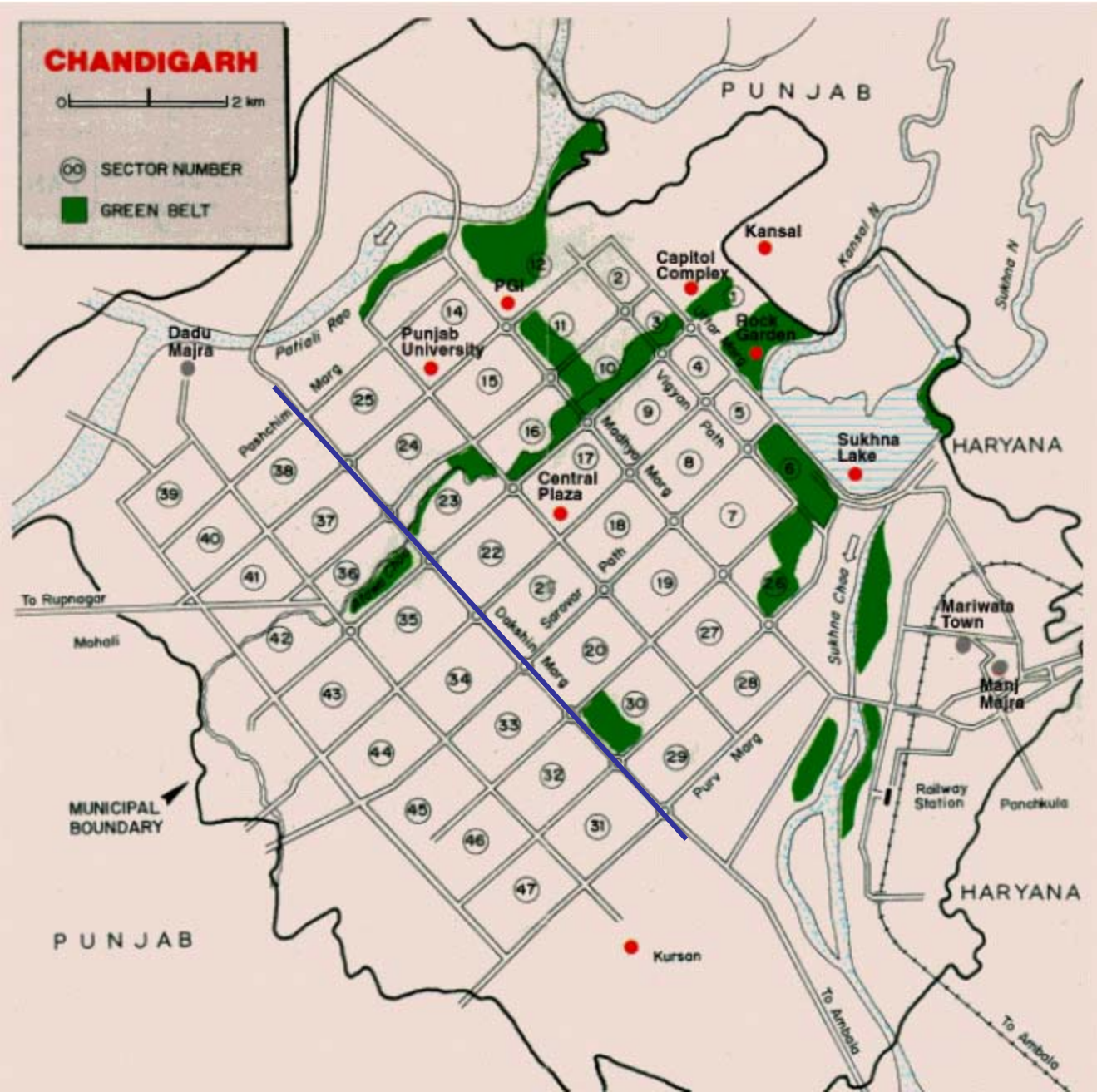
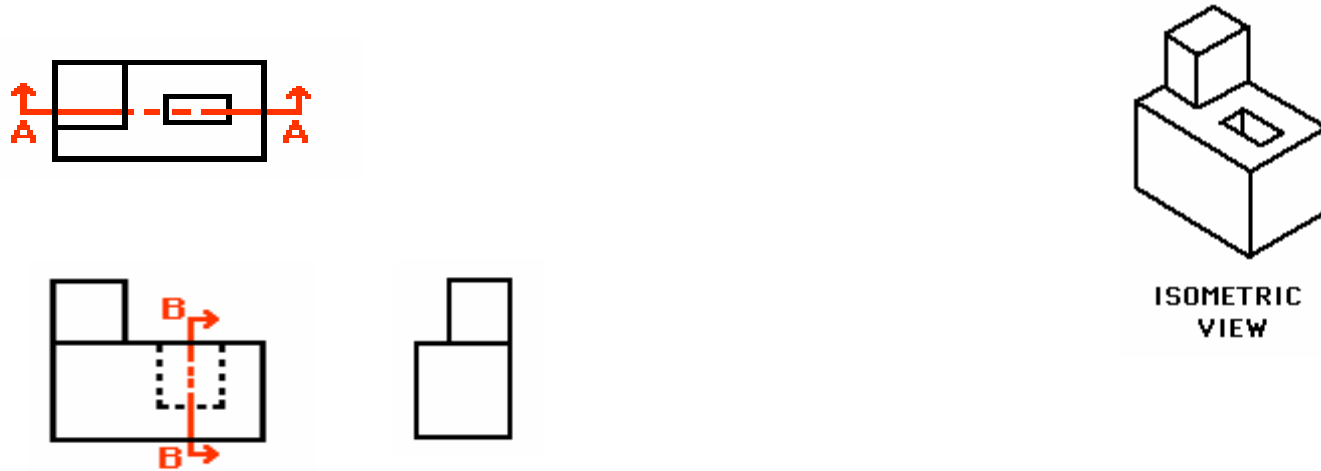


# TA 101

Lecture - 13



# Simple Object and Concept



**Results of section at A-A will be reflected in the front view**

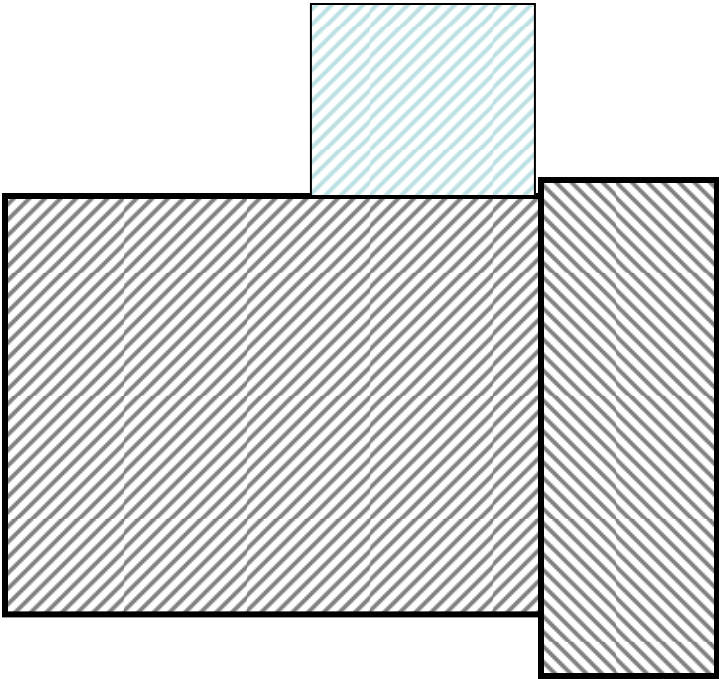


**Results of section at B-B will be reflected in the side view**

- Observe – (i) How to show section plane and what arrow means**  
**(ii) Hatching to differentiate solid and void/spaces**



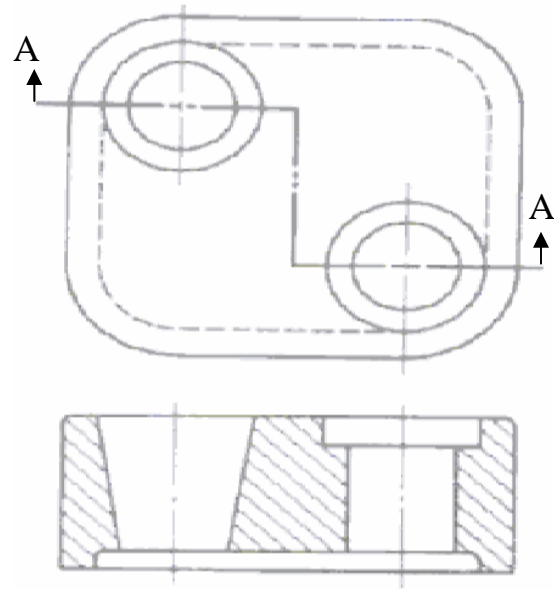
Line to indicate cutting plane  
- use little longer dashes



Show three different pieces  
In section (change in direction)

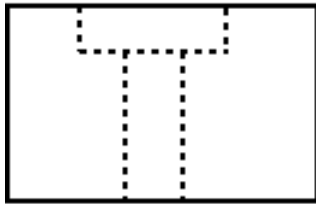
Try drafters edge.

Spacing in hatch line 1.5 to 2 mm  
Do not measure by eye only.

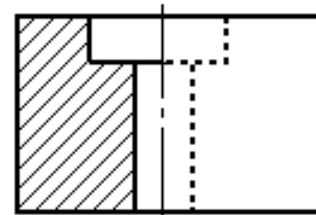


Section A-A

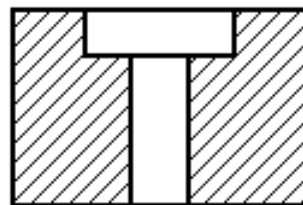
Full Section with Offset



EXTERIOR VIEW



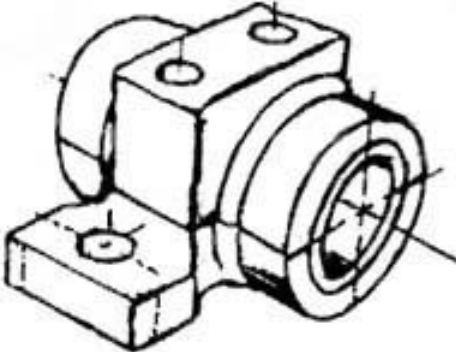
HALF SECTION



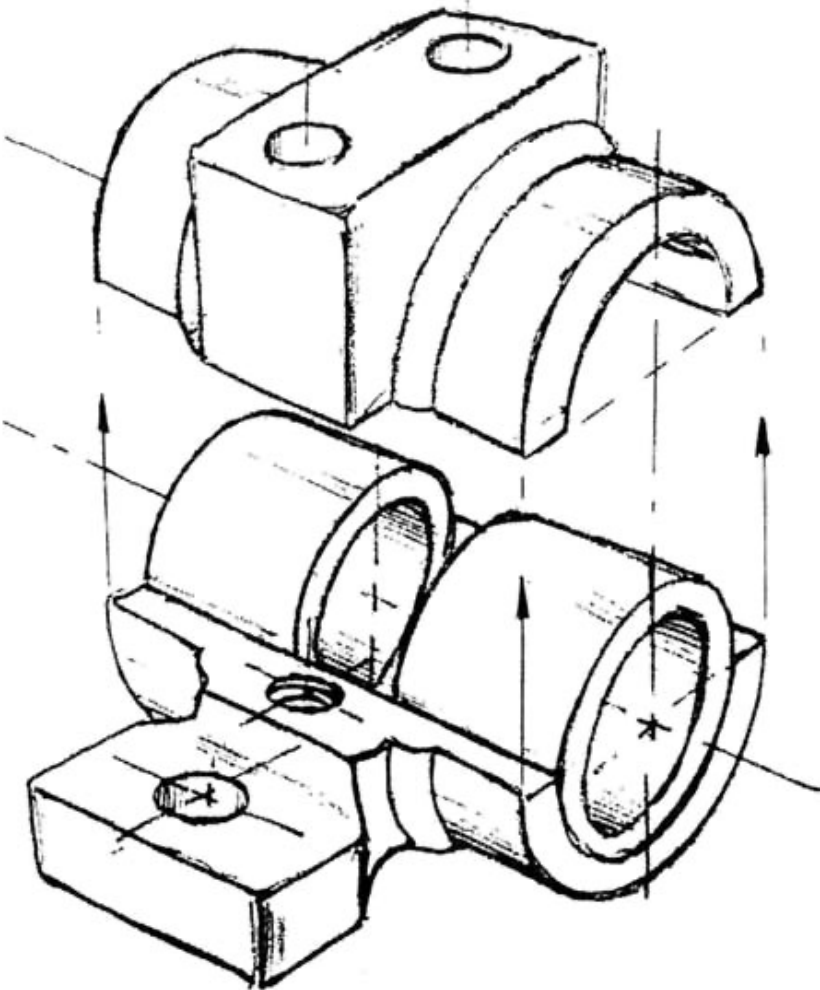
FULL SECTION

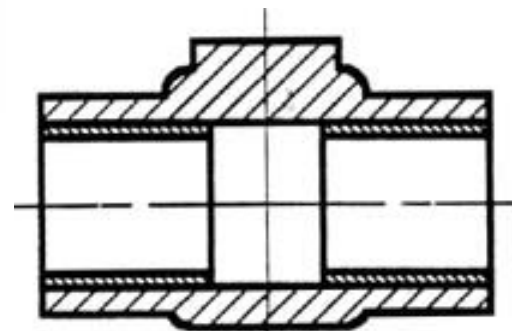
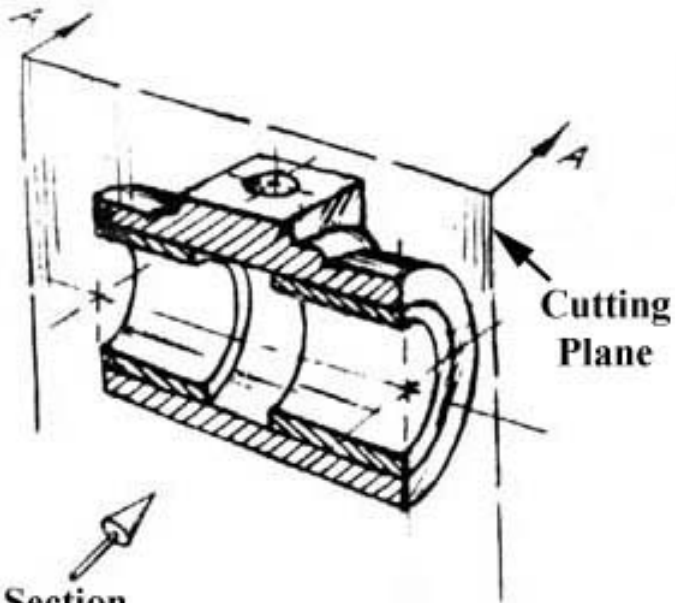
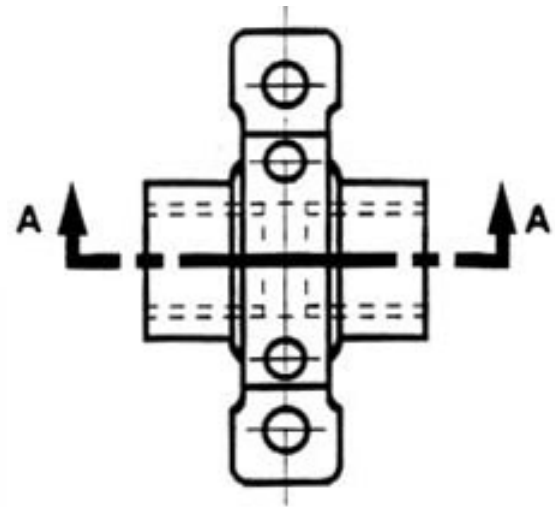
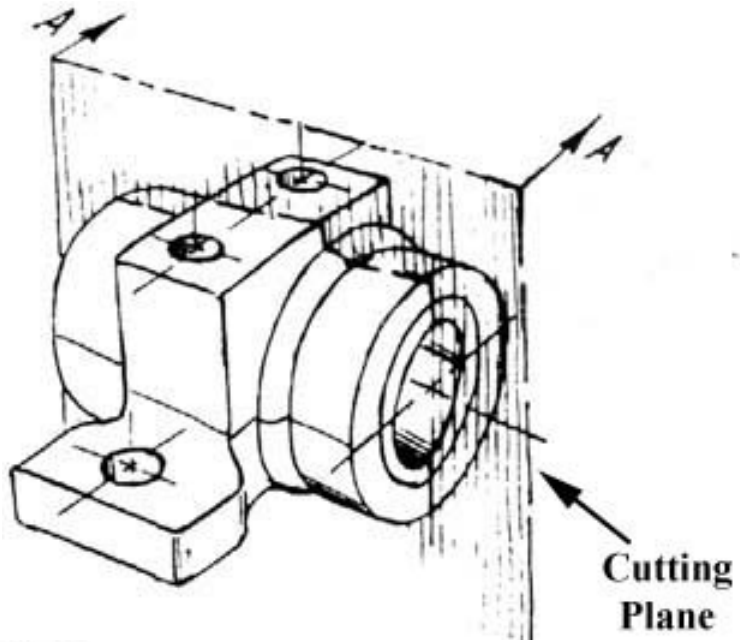
Why Half section?

**Disassembled Pillow-block**



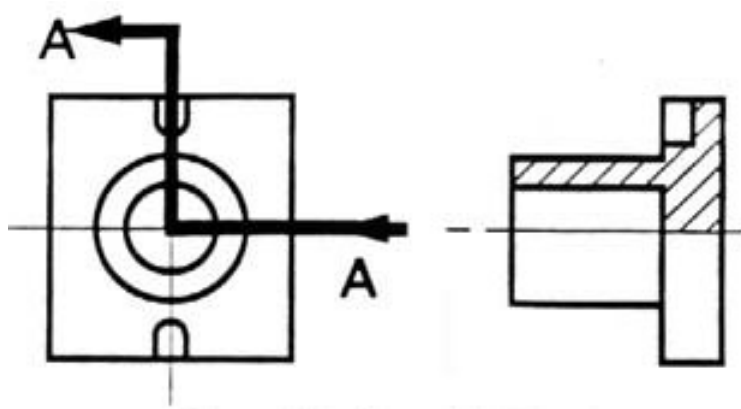
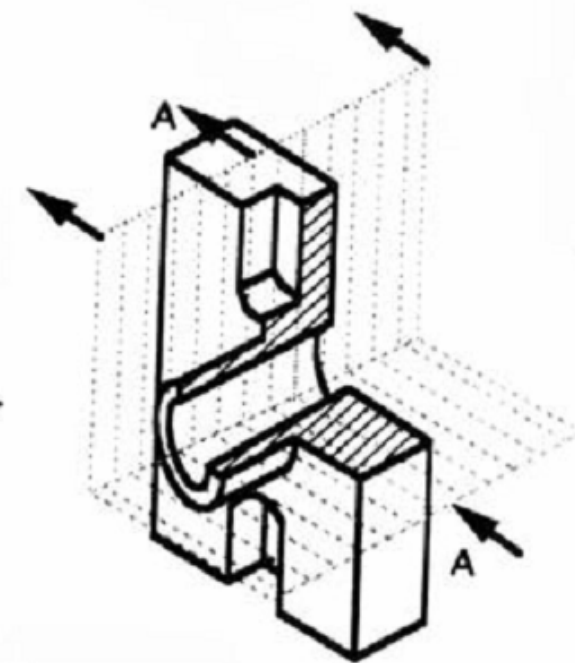
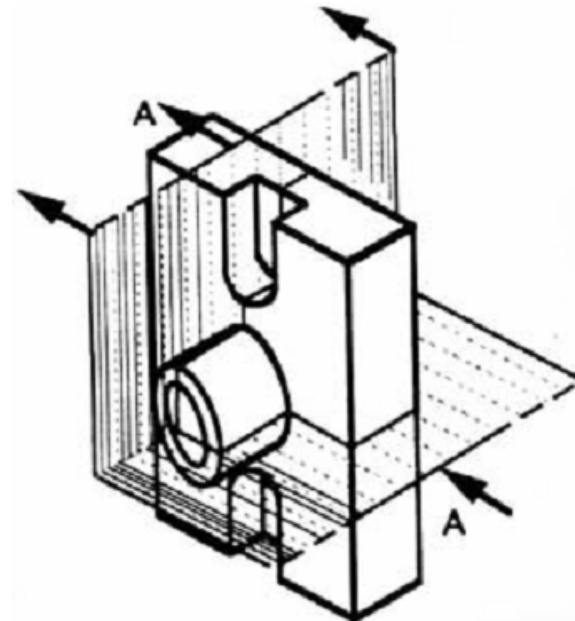
**Pillow-block (Freehand sketch)**





Section  
"A-A"

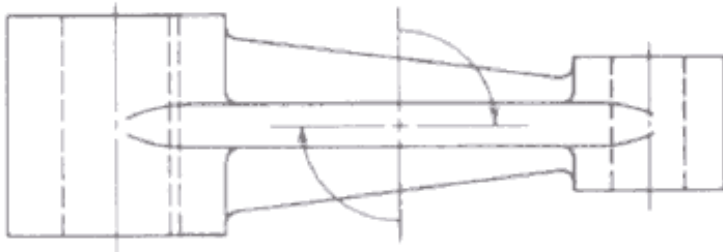
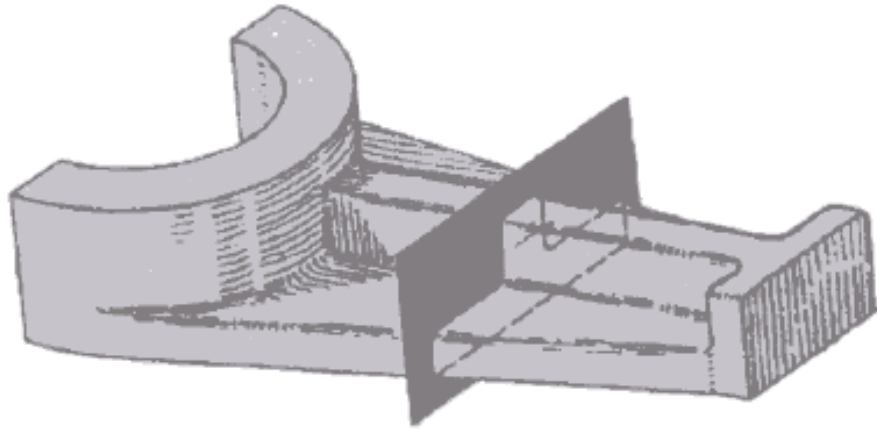
Full Section



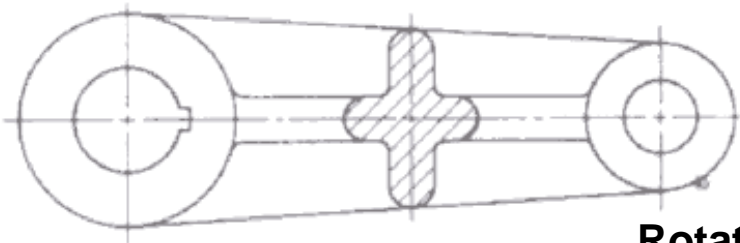
FV

SV- Section

Half Section A-A

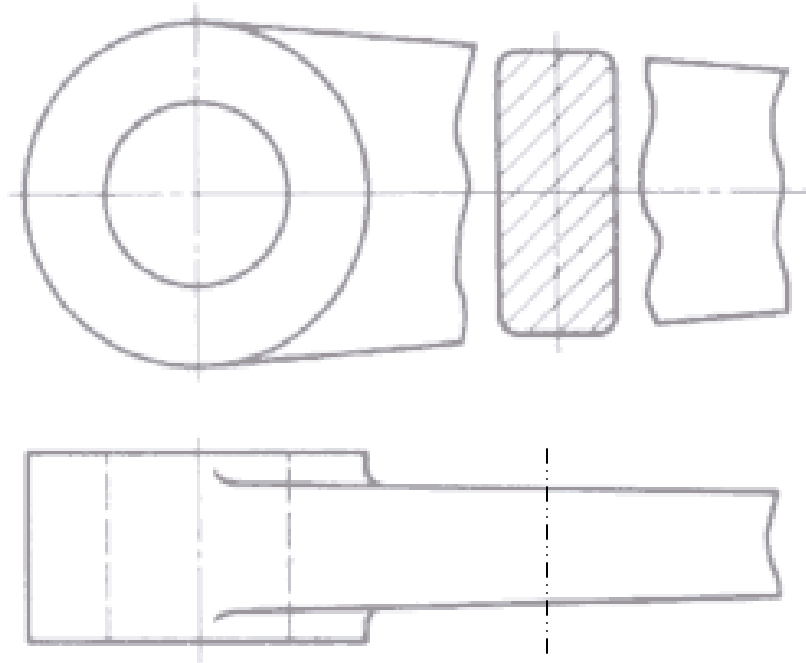


Showing cross section  
To save space



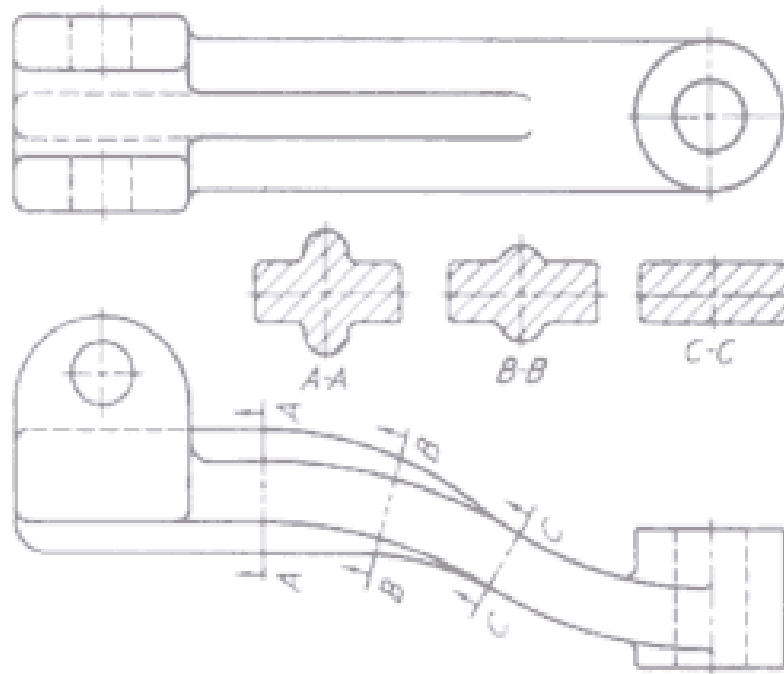
**Rotated Section**

**Rotate the section about vertical axis by 90 deg,  
Depth shown in width**












Rotated section as broken view – when?

What if height of section view interferes with the view



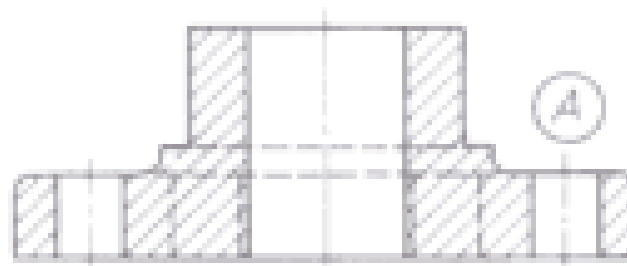
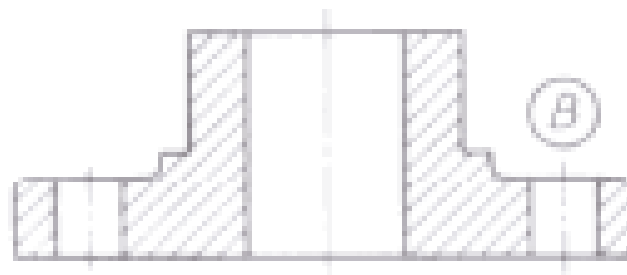
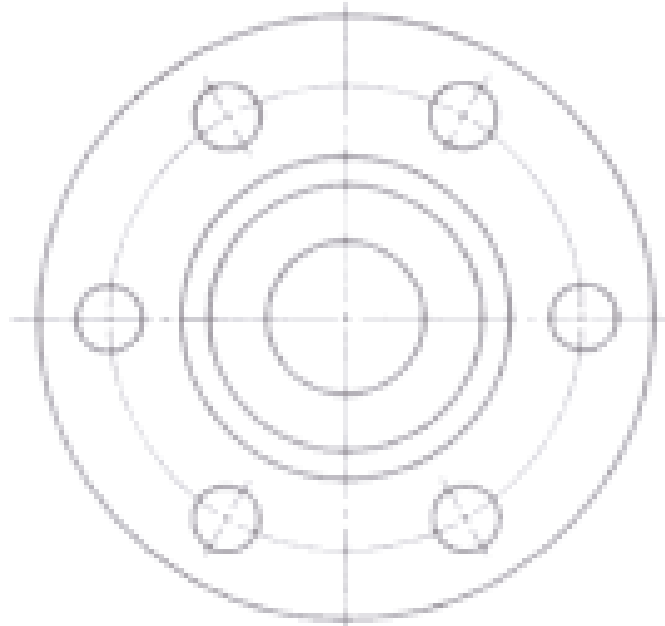
Removed Sections - same purpose as rotated section  
But for clarity remove the section and show it outside the main views

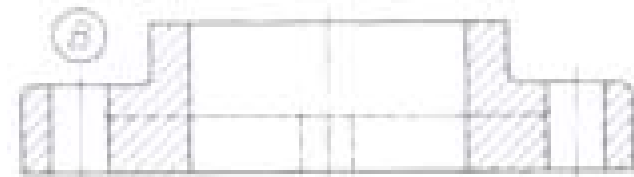
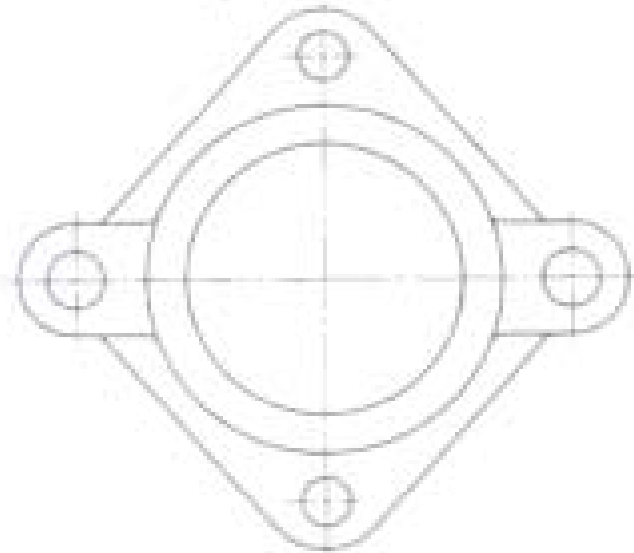
NO.	TYPES OF SECTION LINES	MATERIALS
1		Cast iron, steel, copper and its alloys, aluminium and its alloys. Section lines are inclined at 45° and uniformly spaced.
2		Lead, zinc, tin, white metal. Section lines are crossed each other and inclined at 45° in opposite directions.
3		Glass.
4		Marble, porcelain, stoneware, slate, etc.
5		Rubber, leather, paper, linolium, cork, felt, asbestos, fibre, wax, etc. One of the section lines is horizontal while the other one is inclined at 45°.
6		Liquids, such as water, oil, petrol, kerosene etc.
7		Wood, plywood, etc. along grain.
8		Wood, plywood, etc. across grain.
9		Concrete.

Example:

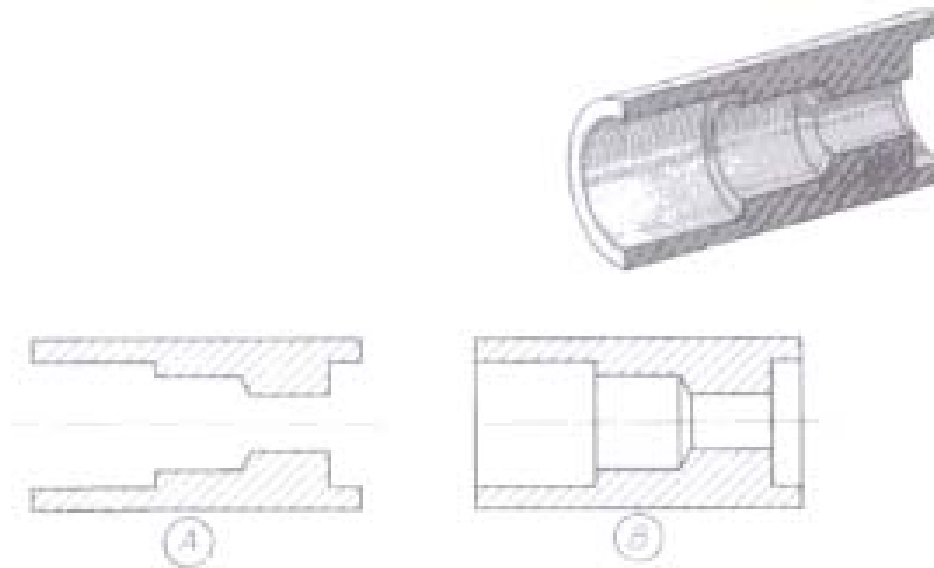
Do not show hidden lines in Section; prefer B over A

... but...this is not a rule

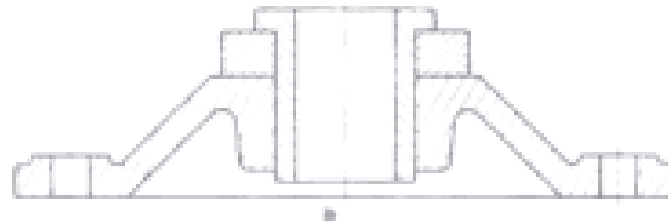




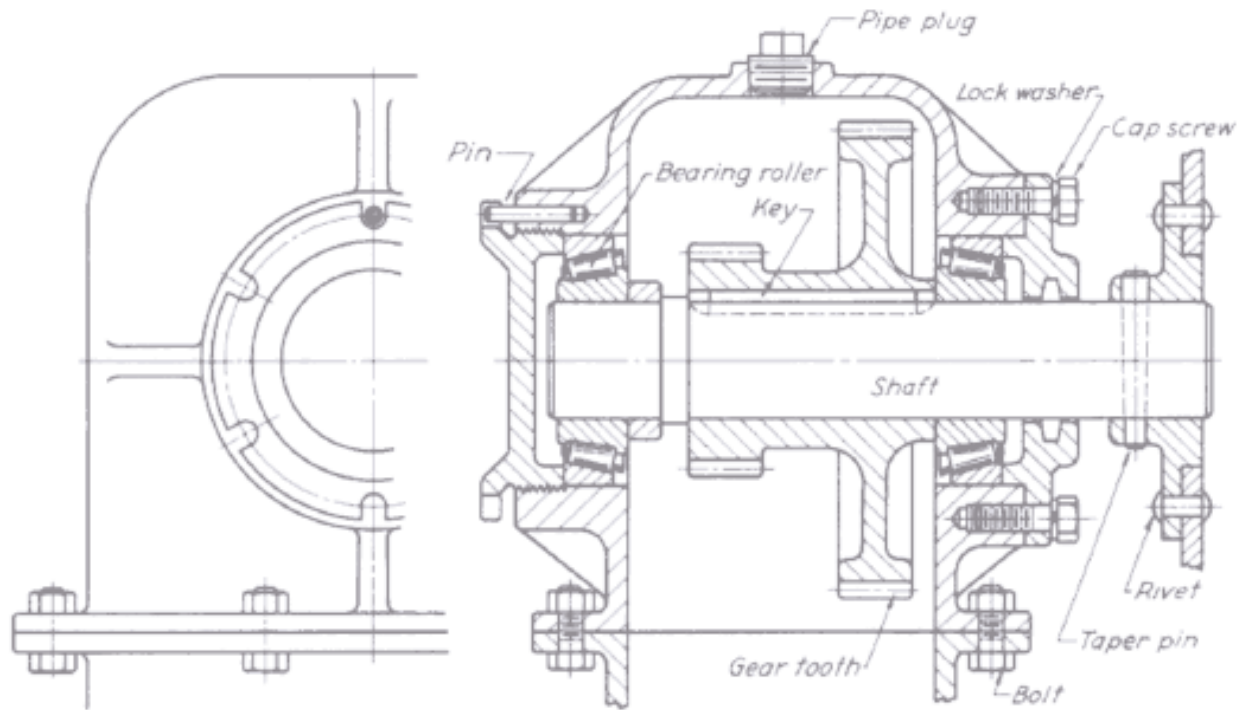
**Show hidden lines in section  
Prefer B over A – why?**



Visible edges are shown after section; B is correct.



Adjacent Pieces... section line – change the angle of hatching lines



What not to section...

Shafts, bolts nuts, pins, rivets ..... Not sectioned